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CASE  
OF  
AMPUTATION OF THE NECK OF THE WOMB,  
FOLLOWED BY PREGNANCY ;  
WITH REMARKS ON THE PATHOLOGY AND RADICAL  
TREATMENT OF THE CAULIFLOWER EXCRESCENCE  
FROM THE OS UTERI.

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## CASE, &c.

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IN his learned work on the Diseases of Females, (Dublin, 1838,) Dr Churchill remarks, (p. 249,) "I am not aware that any attempts have been made in Great Britain to excise the *cervix uteri*."

The following instance of this operation may therefore not be uninteresting, either as regards its details, or the hitherto flattering success that has resulted from it.

In the beginning of May last I was requested by Dr Lewins of Leith, to visit with him Mrs Cameron, who, as he informed me, had a tumour attached to the *cervix uteri*.

The patient, aged 33, had been married for thirteen years. During that period she had borne five living children, and suffered from a miscarriage at the sixth month. In June 1838, she weaned her youngest child. For about a month previously to that date she had a red discharge from the vagina, which was constant in its occurrence, though not great in its quantity. It continued during the autumn. In October, she passed with labour pains of three or four hours duration, a body which the midwife in attendance supposed to be an abortion of the second month. During the period of pregnancy with this alleged abortion, the vaginal discharge was still present. It increased considerably after October, and was now often mixed with coagula of blood. It had always a very offensive smell and more or less of a red tint, but sometimes it appeared comparatively pale and watery. The discharge was as profuse though less discoloured during the night, and when at rest, as during the day and when taking free exercise. From the supposed period of abortion in October, up to the period that I saw her with Dr Lewins in May, three or four cloths were soaked regularly every twenty-four hours by it. Whenever she ventured to walk about without napkins she felt the discharge "running" (to use her own expression) from her. On two separate occasions the escape of pure blood became suddenly so

great as to pass through all the cloths and create great alarm. Mrs C. was not aware of any causes which excited these attacks of hæmorrhage. One of them occurred during the night. She never observed any monthly increase in the discharge answering to the catamenial periods.

During the whole course of the disease Mrs C. had not suffered (if we except the temporary expulsive uterine action in October) any pain or uneasiness whatever in the region of the uterus; but by the time that I first saw her she had become greatly weakened and reduced by the abundant discharges. Her face was pale and anæmic, and she was occasionally obliged to keep her bed in consequence of debility and exhaustion.

Dr Lewins was first called in to see the patient a short time previously to my visiting her along with him. On examination *per vaginam* I found, as Dr Lewins had described to me, a tumour fixed to the posterior lip of the uterus. It was then about the size of a small pear, and was attached by a very broad basis. The surface of the tumour felt somewhat rugged and granulated. It was firm but not hard in its consistence. The patient did not complain of any pain upon touching or pressing its surface. Its superficial vessels bled freely under every attempt at examination. On introducing the *speculum vaginæ*, and embracing the diseased mass within the further extremity of the instrument, the surface of the tumour was seen to be irregular, and of a bright-red, strawberry colour.\*

\* It is almost unnecessary, we believe, to insist at the present day, upon the importance of the early and accurate local examination of the uterus in all cases of suspicious vaginal discharges. In some instances, examination by the finger may be sufficient, but in every doubtful case the speculum should likewise be resorted to if there is any affection of the vagina or cervix. We have found it often confirming, and not unfrequently also changing and rectifying the opinion which the mere tactile examination had led us to adopt. In this country great difficulties have been placed against the more general introduction of the speculum into practice in consequence of the disagreeable and revolting exposure of the person of the patient, which is usually considered necessary in its employment. We have latterly in our own practice endeavoured to avoid this very natural objection, by teaching ourselves to introduce and use the instrument when the patient was placed on her left side in the position usually assumed in making a tactile examination, and with the nates near the edge of the bed. We strongly recommend our professional brethren to follow this plan, as by it, and with attention to the management of the bed-clothes, we have found that the instrument can be perfectly employed with little, or indeed without any exposure of the body of the patient. The speculum is introduced easily without the assistance of sight, and the mouth of it only requires to be afterwards uncovered, in order to enable us to examine the *cervix uteri* and top of the vagina. We have made trials of many different forms of specula, and find, for almost all purposes, that of Ricord by far the most manageable. In exposing the *cervix uteri* for the purpose of drawing blood from it by scarifications, in cases of chronic congestion and metritis, we have occasionally employed a tubular speculum with advantage, but even in this case the double-bladed instrument is equally useful, and in some instances preferable. In a case of ulcer of the *os uteri* which we are at present attending with Dr John Gairdner, and where the passages are much relaxed and the uterus very low in the vagina, we have, on Dr Gairdner's suggestion, employed with much

It appeared possible to grasp the basis of the tumour with a ligature ; but both Dr Lewins and I were of opinion that the free amputation of the *cervix uteri*, with the diseased structure attached to it, offered by far the most probable means of success. We communicated this opinion to the patient's husband, and at the same time stated, that, even under this method of treatment, the disease would probably recur. After a delay of about three weeks, Mrs C. announced that she was ready to submit to the operation that we had proposed. In making a re-examination after that short interval, I was perfectly convinced that the excrescence had grown considerably, and was extended in its base so as to involve more of the angles of the *os uteri*, as well as of its posterior lip.

On the 25th May, I proceeded to excise the *cervix uteri*, and was assisted in the operation by Dr Lewins and Mr Ziegler.

The patient was laid upon her face, her body placed across the bed, and her lower extremities allowed to hang over the front of it. The thighs were held separate from one another. My object was to pull down the diseased neck of the uterus till it protruded externally beyond the mouth of the vagina, and then freely excise it. For this purpose I introduced the two first fingers of my left hand into the vaginal canal up as far as the tumour, and used them as a guide by which I fixed the teeth of a long vulcellum into the sides of the excrescence. Its tissue, however, was so soft as to tear under slight traction, and thus afford me little purchase for pulling the mass downwards. The instrument was refixed nearer the root of the excrescence, and a second vulcellum was superadded to render the purchase the more secure. With these I was enabled to pull down the tumour gradually and cautiously until it was entirely protruded beyond the external parts. Dr Lewins and Mr Ziegler having satisfied themselves that the *cervix uteri* and whole bulk of the tumour was extruded, I cut off the protruded mass, dividing it from behind forwards, and removing the whole vaginal portion of the *cervix uteri*. The uterus immediately slipped up into its natural position. Very little hemorrhage followed. I stuffed, however, the vagina pretty firmly, under the fear that dangerous bleeding might supervene.

The patient bore the operation well, and complained wonderfully little during it. In the evening, Dr Lewins had to remove the vaginal plug, in order to allow her to evacuate the bladder. It was not considered necessary to replace it. No marked morbid symptoms whatever, either local or constitutional, fol-

lowed. I used a short tubular speculum of only an inch and a-half in length, and with a deficiency or opening along the course of one side of it, of sufficient size to enable us to pass our finger for the purpose of placing the diseased part in the proper centre of the instrument. We have thus been enabled to touch easily the ulcerated surface with different applications ; while with the usual instruments it was found a very difficult task to fix in this instance the very mobile *cervix uteri*.

lowed. The great vaginal discharge immediately ceased. On being interrogated in relation to this point on the second day, the patient emphatically described herself to Dr Lewins as "*quite dry*," and that for the first time for many months. The incised surface, when examined through the speculum a few days after the operation, presented a healthy granulating appearance. It was not considered advisable to allow her to sit up till the tenth day after the operation was performed, and in a few days more she began to walk about the house and perform her usual domestic duties.

She has not been one hour sick since the period of the operation, and has now regained her usual strength and spirits.

No morbid discharge from the vagina of any kind has hitherto appeared. She has never since menstruated; and about five weeks ago she fancied that she felt the symptoms of quickening. On examining the abdomen to-day (14th November) with the stethoscope, I heard distinctly both the placental souffle and the sounds of the fœtal heart. The *os uteri* is closed, and on examination by the finger, gives the sensation of a firm puckered cicatrix.

The excrescence after its removal was found to measure two inches and three-quarters at its broadest part, and two inches and a quarter at its greatest depth. The thickness of it where it implicated the posterior lip of the *os uteri* was one and three-eighths of an inch, but on either side it stretched forward, and involved the angle between the anterior and posterior lips; thus rendering this admeasurement greater on its lateral parts. The anterior lip of the *os uteri*,<sup>†</sup> (see Plate VI. Fig. 2. *a*.) which was fully removed as high as the reflection of the vagina, seemed sound except at the above angles. The posterior surface (Fig. 1.) of the posterior lip was densely and completely covered by the excrescence, up to the reflection upon the vagina.\* In excising the diseased part, I removed it so high as to bring away all around, a small portion of the reflection itself of the mucous membrane of the vagina. The surface of this portion of membrane, as thus removed in attachment to the upper edge of the excrescence, appeared quite healthy on careful examination of the excised mass. (See Fig. 2, *d*, *d*, *d*.) The surface of the tumour presented a well-marked small granulated appearance with deeper fissures crossing it, and giving it an irregular and lobulated appearance. The sides of it were considerably and deeply lacerated (*b*, *b*, *b*,) in various places by the teeth of the vulsellum. On rubbing down any small part of the recent tumour between the finger and thumb, a kind of vascular or cellular frame-work was all that was left behind. The mass, before dividing it, was steeped in a strong alcoholic solution of corrosive sublimate,

\* *C*, *c*, (Fig. 2.) the surface of the incision; *c*, a probe passed through the *os uteri* and canal of the cervix.

in order to insure its preservation. On making a section of the tumour after it had been thus sufficiently indurated, it presented to the touch and sight an appearance greatly resembling that of the brain when hardened by the same menstruum. A number of minute cells are scattered over the surface of the section. On slightly rubbing any part of the section (see Fig. 3,) but particularly the more external part of it with the handle of the scalpel, its apparently homogeneous structure at once breaks up and revolves itself into an immense number of very small connected grape-like granules. These same granules impart to the external surface of the excrescence its peculiar minutely mammillated structure; while their arrangement into nodules, in consequence of the divided and lobulated arrangement of the superficies of the tumour, gives to the whole a striking resemblance to the head of the cauliflower. The accompanying drawings of the tumour by my friend Dr Paterson give excellent representations of its external form.

On submitting some very thin slices from the surface of the section of the tumour, (Fig. 3.) to a powerful microscope in the possession of Dr Reid, it was seen to be composed of a number of cells arranged in some places in groups, in others in irregular lines. These cells contained each a large nucleus, and this nucleus inclosed several small nucleoli. The structure in question of cells or cystoblasts, incasing nuclei and nucleoli, has been shown to be so common as an elementary form of natural structure, by Schleiden and Schwann, and as an elementary form of various morbid tissue by Valentin, Gluge, and Muller, that no conclusion, in the present state of our knowledge, can be positively drawn from this microscopic structure alone. But it may be interesting to add, that none of the caudate or spindle-shaped bodies described by Müller as often existing in morbid encephaloid structures were seen in any section that was examined. The microscopic appearance of the compound cell-globules constituting the granules, and composing the mass of the excrescence, are well represented in the drawing, (Fig. 4,) kindly made for me by Mr Goodsir.

*Pathological Nature of Cauliflower Excrescence.*—The history, symptoms, physical characters, and minute structure, of the preceding tumour appear to refer it indubitably to that species of growth which was first accurately distinguished and described by Dr Clarke, under the quaint but expressive name of the “Cauliflower Excrescence from the *os uteri*.”\*

The pathological nature of this variety of morbid growth has given rise to considerable difference of opinion among physicians. Drs Gooch, Hooper, Davis, and Lee, regard it as truly cancerous in its character. Others, as Drs Clarke, Burns, and Waller,

\* See Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, Vol. iii. p. 321. (1809.)

consider it as a morbid tissue, not necessarily of a malignant or carcinomatous nature. A number of circumstances appear to me to show, that in reference to, at least, the first stage of cauliflower excrescence, the opinion of these latter authors is probably correct. The occurrence of the disease in some cases as early as the 20th year of life;\*—its occasional shrinking and almost total disappearance upon the application of a ligature, or after death;†—the frequent slowness of its general progress during life; the apparent absence of diseased deposits in the neighbouring tissues and parts upon the dead body;‡—and, above all, the alleged restriction and even complete removal of the tumour, in one or two instances, by the use of astringent applications and other simple means,§ form so many circumstances strongly pointing to the opinion that in the earlier part of its progress the tumour cannot be regarded as of a carcinomatous character.

Has it any analogy in its pathological nature and origin—as it certainly has in its physical characters—with the soft warts and condylomata that sometimes form on the mucous membrane of the vulva and entrance of the vagina? These warts and condylomata have the same tendency to regeneration after their imperfect removal, and present to us a striking exception to the general pathological law of the local reproduction of a morbid growth being a sign of its malignancy.

But, whatever view we may take of the primary nature of the cauliflower excrescence of the *cervix uteri*, we have sufficient evidence for believing either that this disease has been often confounded with carcinomatous or medullary fungus from the *cervix uteri*, from the want of adequate diagnostic marks to distinguish them; or that, though non-malignant in its commencement, the cauliflower excrescence may, like some other local benign growths, become the seat of carcinomatous deposit and malignant action, during its progress. Thus it has been found by Gooch|| and Madame Boivin¶ to return again in a malignant form, after its imperfect removal by the ligature or knife. In an instance mentioned by Dr Davis,\*\* its removal was followed, after the lapse of a considerable period, by its reproduction, and ultimately by carcinomatous ulceration; and in two cases that occurred to Professors

\* Sir C. M. Clarke on the Diseases of Females, Vol. ii. p. 62.

† Ibid. p. 70 and 75.

‡ Ibid. p. 66 and 70.

§ Ibid. p. 105 and 108. A lady, aged 32, had a continued profuse watery discharge mixed occasionally with blood. She was greatly weakened, pale and emaciated. A cauliflower mass projected from the surface of the *os uteri*. Several remedies, with cupping and local astringents, were ordered and assiduously persevered in. After two years, "no difference could be felt between the *os uteri* of the patient and that of a woman in perfect health." (Clarke, p. 107.)

|| On the most important Diseases peculiar to Women, p. 288.

¶ Henning's translation of Boivin and Duges' work, p. 300.

\*\* Principles of Obstetric Medicine, Vol. ii. p. 744.

D'Outrepont\* and Siebold,† in which large tumours having a cauliflower form were found affixed to the *cervix uteri* during parturition, the neighbouring uterine tissues, as well as the contiguous structures of the bladder and uterus, were found in a carcinomatous state upon the *post mortem* dissection. In another case, in which Michaelis‡ excised what he terms a *fungus medullaris* with a cauliflower appearance, from the anterior lip of the uterus during labour, the posterior lip of the organ afterwards degenerated, and cancer of the stomach ultimately supervened.

If these latter cases were not merely more advanced stages of the cauliflower excrescence, but, as appears to us not improbable, diseases originally and pathologically different from it, though resembling true cauliflower excrescence in its peculiar form and external physical characters, are there any means which might enable us to form a diagnosis between the two affections? The whole subject is one certainly demanding more careful observation and deeper investigation. The nature and characters, both physical and chemical, of the vaginal discharges in these and other maladies of the sexual parts, require to be more accurately examined and discriminated. May the degree of mobility of the *cervix uteri* serve in any case as a source of diagnosis? "The tendency of cancer, (as observed by Muller,§) is to interfere with the natural structure of surrounding parts, while those formations which are of a benignant nature leave the neighbouring healthy tissues unaltered." In carcinoma of the *cervix uteri*, we thus generally find, at even a pretty early stage of the disease, that the organ has become more *fixed* and immoveable than natural, in consequence of the morbid deposit affecting both the structure of the neck of the organ and the contiguous surrounding tissues. Does the reverse of this hold good with regard to cauliflower excrescence of the *cervix uteri*?

*Radical Treatment of Cauliflower Excrescence.*—Different measures have been proposed for the radical removal of cauliflower excrescences from the *cervix uteri*. The caustic, ligature, and knife have each been employed. With regard to the two former it seems superfluous to hope that the good results following upon their use can be more than temporary. The basis of the diseased structure will in all probability be left. Occasionally both the caustic and the ligature appeared to have produced injury rather than good, by the irritation and increased action that they have excited in the diseased parts.

If any radical operation and cure for cauliflower excrescence

\* Abhandlungen Geburtshulffichen Inhalts, Th. i. p. 276.

† Dissertatio sistens casum singularem carcinomatis uteri cum graviditate conjuncti.

‡ Neue Zeitschrift-fuer Geburtskunde, Bd. iv. S. 176.

§ On the Nature and Structural Characteristics of Cancer, West's translation, p. 66.

be attempted, the excision of the tumour with the whole of the vaginal portion of the *cervix uteri*, to which it is attached as a basis, appears to us to be the only measure which can at all be hoped to insure ultimate success. The disease has no doubt recurred in repeated instances even after this operation. In some of these cases it probably had advanced too far onwards to a carcinomatous character. In others the failure might be attributable (as confessed by Boivin and Duges, in regard to the cases which they themselves report,) to "the tumour being alone removed," and not the *cervix uteri* also, which forms its seat, and "is always more or less affected."\* In a few authenticated cases on record, in which complete amputation of the *cervix uteri* with the attached tumour was performed, the patient was known to have remained free from any symptoms of the disease for several years afterwards. A search through the medical literature of the last twenty years would, in all probability, enable us to adduce several such instances; but it may be sufficient for our present purpose to adduce three cases, of which we have the notes lying before us, and that appear to us, as far as we can judge from the details and expressions of the reporters, to have been probable instances of the same species of tumour that Dr Clarke originally described.

CASE 1.—In an instance of what is termed fungous cancer (*cancer fongueux*) by Colombat,† that surgeon amputated the *cervix uteri* on the 2d June 1830. The wound completely cicatrized, and the patient's health was re-established. She died in April 1832 of epidemic cholera.

The fungous cancer, Colombat observes in another part of his work, (p. 711,) is one of the forms of cancer which is the least liable to return after excision of the parts.

CASE 2.—Boivin and Duges mention a case of cauliflower excrescence of more than two inches in diameter, which was attached to the anterior lip of the *cervix uteri*. It was removed, along with more than six lines of the *cervix uteri*, in November 1828. The patient was alive in October 1832, and is then reported by the above authors as only labouring under some symptom of menorrhagia and dysmenorrhœa at the menstrual periods.‡

CASE 3.—An instance is reported by Duparcque, under the head of "Exuberance de l'Uterus," in which Hervez de Chegoin excised the two lips of the uterus, affected with what the operator terms "a granular strawberry inflammation," and which he alleges has often been confounded with cancer. The discharge and other symptoms of the disease had been present two years previously to the operation. At the date of the report (four years

\* Heming's Translation, p. 301.

† Colombat de l'Isere; Traité des Maladies des Femmes, Tom. ii. p. 701.

‡ See Heming's Translation of Boivin and Duges' Treatise on Diseases of the Uterus, p. 300-301, and drawings of the excrescence in the Atlas, Pl. xxiv. fig. 3 and 4.

after the excision of the diseased part) the patient remained perfectly well.

In the case of Mrs C. which I have above reported, I undertook the amputation of the diseased part with, as has been already said, strong doubts as to its ultimate success. The patient's peace of mind was broken, and her constitution was so rapidly breaking down under the constant, profuse, and weakening discharges which afflicted her, that she would in all probability have soon sunk under them. Immediately after the operation was performed these discharges completely ceased, and have never since returned. Her health and strength have been in the meantime restored to her; and she is at the present moment, as I have already shown, advanced beyond the middle period of pregnancy. The morbid characters of the diseased structure that I removed are such certainly as to render its future regeneration not at all improbable; but as yet there are no local appearances of its return; and,—taking the very worst view of the case,—there seems to be no reasonable doubt but that the operation has restored the bodily comfort, and prolonged the life of the patient, if it has not entirely freed her from the risk of a future return of the disease.

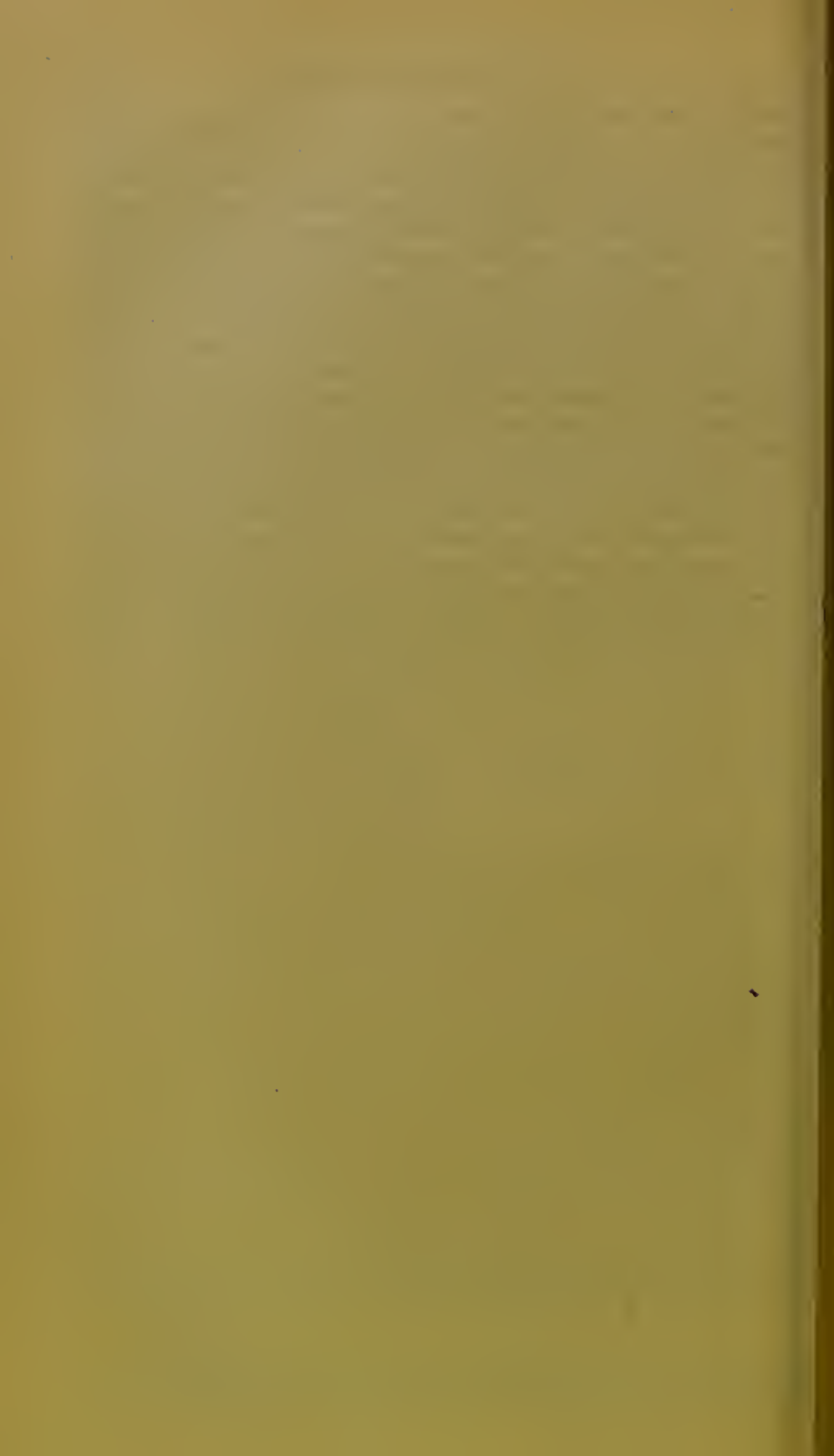


FIG. 1.



FIG. 3.

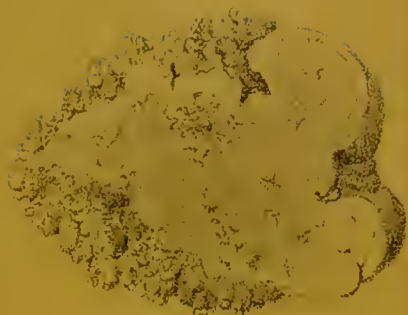


FIG. 2.



FIG. 4.







